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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,942	10/29/2003	Jim Heong Yim	3811-0128P	6134
2292	7590	09/01/2005		
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			EXAMINER MOORE, MARGARET G	
			ART UNIT	PAPER NUMBER
			1712	

DATE MAILED: 09/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/694,942	YIM ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Margaret G. Moore	1712	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 June 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 to 21 is/are pending in the application.
- 4a) Of the above claim(s) 17 to 21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 to 9, 15, 16 is/are rejected.
- 7) ☒ Claim(s) 10 to 14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

*Handwritten mark*

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1. Applicant's election of Group I in the reply filed on 6/13/05 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

2. Please note that, as a result of this election, the application has been transferred. Currently Examiner Margaret Moore is handling this application.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1 to 5 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Konishi et al.

Konishi et al. teach a composition containing a silicate polymer and a saccharide. See for instance the silicate polymers as described on column 2, lines 40 and on. This meets the claimed inorganic matrix precursor. See column 3, lines 16 to 18, which teach various saccharides meeting claims 4, 5 and 7. See also the working examples. This anticipates these claims. Note that the amounts of water (solvent) and saccharide in the examples meet claims 2 and 3.

5. Claims 1 –3, 15 and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Zhang et al.

Zhang et al. teach the preparation of porous films. This includes a saccharide

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compound as a crosslinking compound, a polyimide as a non-crosslinking compound and a solvent. See for instance the abstract, as well as paragraphs 26 and 27 on column 4. This anticipates claim 1 as well as claim 15. See Example 10, which prepares a composition meeting the requirements of claims 2, 3 and 16.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1 to 3, 6, 8, 9 and 16 rejected under 35 U.S.C. 103(a) as being unpatentable over JP 11-322992, herein '992, as interpreted by the English language abstract.

The Examiner has requested an English language translation of this reference but was unable to obtain the translation before this deadline for this office action.

'992 teaches a porous film prepared from a silsesquioxane as a matrix precursor and a component (B) which can be a compound having a saccharide chain structure. This differs from instant claim 1 in that the abstract does not specifically teach a solvent. The composition in '992 is used as a coating. The skilled artisan would have found the use of solvent for dissolving both the saccharide and the silsesquioxane to have been an obvious means of applying the coating composition. Thus, while the solvent is not specifically mentioned in this abstract, the skilled artisan would have found the use of a solvent with (A) and (B) in '992 to have been obvious, rendering obvious the instant claims.

For the record, the Examiner strongly believes that a translation of '992 will reveal the addition of a solvent in this composition, but since one is not specifically taught in the abstract she cannot make this an anticipation rejection.

Adjusting the amount of solids and solvent in an effort to obtain a useful and/or optimal coating composition would have been obvious to the skilled artisan. It has been

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held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art (i.e. does not require undue experimentation). In re Aller, 105 USPQ 233. This renders obvious claims 2 and 3. The phrase "saccharide chain structure" suggests a polysaccharide such as that found in claim 6. With regard to claim 9, note that the skilled artisan would have immediately envisioned such silsesquioxanes in view of the teachings in the abstract since these are conventional silsesquioxanes used to form porous films and also since they are the most basic forms of silsesquioxanes.

Similarly, the skilled artisan would have found the selection of a solvent within the breadth of claim 16 to have been obvious, in view of the fact that these are conventional solvents used in the preparation of porous films (see for instance Zhang et al. or Yim et al., the teachings of which are relied upon in that they exemplify that which is well known in the art and would have been obvious to the skilled artisan).

8. Yim et al. is cited as being of general interest. This teaches a composition similar to that claimed, but containing a cyclodextrin component rather than a saccharide.

9. Claims 10 to 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


The prior art fails to teach or suggest these particular siloxane matrix precursors with a saccharide compound as claimed. For instance, in Yim et al. the Examiner was unable to find any motivation for the skilled artisan to replace the cyclodextrin porogen therein with a saccharide.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Margaret G. Moore whose telephone number is 571-272-1090. The examiner can normally be reached on Monday to Wednesday and Friday, 10am to 4pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Margaret G. Moore  
Primary Examiner  
Art Unit 1712

mgm  
8/30/05